

REMARKS

Reconsideration and withdrawal of the outstanding ground of rejection is respectfully requested in light of the above amendments and the remarks that follow.

The Examiner now rejects claims 4, 5 and 7 under 35 U.S.C. 103 as unpatentable over Ostwald in view of Duffy and further in view of the newly cited Weidner (U.S. Patent Re. 27,085). The tertiary reference to Weidner is cited for disclosing electrically insulating material 22s extending to a location substantially midway along the threaded shank 10b in Figure 3.

The Examiner contends that it would have been obvious to modify the dynamoelectric machine of Ostwald to provide it with the electrically insulating epoxy powder composition coating and configuration disclosed by both Duffy and Weidner. The Examiner also contends that it would have been obvious to one of ordinary skill in the art to provide the coating with a thickness of about 0.004 to about 0.014 inch in light of the Examiner's belief that there is no invention in discovering the optimum workable ranges by routine experimentation.

As previously noted, the primary reference to Ostwald discloses a traditional insulating bolt arrangement where the bolt 14 is utilized in combination with a metal washer and an insulating washer 22, with the bolt extending through the core 9 and threaded into the housing 10. A second insulating washer 23 is utilized at the bottom of the core. Thus, Ostwald utilizes no fewer than four separate parts, including the bolt.

The secondary reference to Duffy relates to threaded fasteners and has for its principal object the reduction of insulating drive torque. Thus, Duffy discloses coating

the tip end or some additional length of a threaded portion of a fastener with a Teflon® coating. Duffy seeks to provide a coating that will protect, insulate or mask the threads of the fastener from unwanted contamination or a deposition of material on the threads. By lubricating the threads, the fastener is less likely to pick up other materials such as corrosion inhibitors, fibrous insulation, and the like, as the fastener is threaded into a second component.

The Examiner apparently relies on Figure 21 of Duffy to suggest the application of the coating to at least a portion of the threaded shank of the bolt. In this regard, only the first thread 523 of the shank 522 has the lubricating coating applied thereto (see column 19, lines 3 through 7). Duffy also discloses in Figure 24, however, a threaded weld stud where the entire shank 537 is coated with a masking material 538. Note, however, that the threaded weld does not incorporate an integral radial flange.

In Weidner, the washer 20 is not integral with the bolt head and thus, despite the presence of the rubber ring 22, there is no continuous coating between the underside of the flange and the threaded shank. Note in this regard that the axial flange 21d of the washer penetrates the seal 22 to provide metal-to-metal contact between the washer and the member 31. Moreover, the extended length of the rubber ring 22 that results from threading of the bolt into member 32 does not provide a "coating" as required by claims 4 and 7 of this application. As such, there is nothing in Weidner that would suggest any modification of Duffy and/or Ostwald.

In addition, claims 4 and 7 now require that the coating remain functional with the plurality of bolts fully tightened and at an electrical potential of 2500 volts. That portion

of Duffy relied upon by the Examiner (column 4, lines 1-5) discloses that the coating in Duffy is effective only up to about 500-600 volts.

Accordingly, this new combination of references as applied by the Examiner fails to provide sufficient evidence to warrant a conclusion of obviousness under 35 U.S.C. 103. Not only have the references been combined with the utilization of impermissible hindsight, but it is also readily apparent that the resulting construction is not that which is required by independent claims 4 and 7.

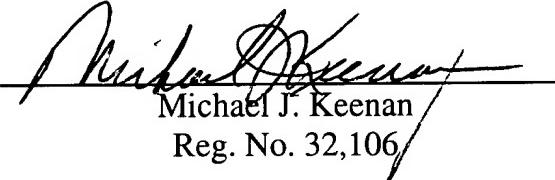
Accordingly, claims 4, 5 and 7 are now in condition for immediate allowance, and early passage to issue is requested. In the event, however, any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

Attached hereto is a marked-up version of the changes made to the specification and claim(s) by the current amendment. The attached page(s) is captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Amend claims 4 and 6 as follows:

4. (Amended) A generator assembly comprising a seal casing and an endshield, wherein said seal casing and said endshield are secured by a plurality of electrically insulated bolts, each bolt having a head with an integral flange and a threaded shank; an electrically insulating epoxy powder composition coating on the underside of said integral flange, extending continuously from said underside of said flange to a location substantially midway along said threaded shank, and wherein said coating remains functional with said plurality of bolts fully tightened and at an electrical potential [in a range] of [500-]2500 VDC.

7. (Amended) An electrically insulated bolt having a flanged head and a threaded shank; an electrically insulating epoxy powder composition coating having a thickness of about 0.004 to about 0.014 inch applied to at least an underside of the flanged head and extending continuously from said underside of said flanged head to a location substantially midway along said threaded shank, and wherein said coating remains functional when the insulated bolt is fully tightened, at an electrical potential [in a range] of [500 to] 2500 VDC.